27 Sanson #10

An Inaugural Dissertation
on
Dropsy in the Cellular Membrane
by
John R. Hicks of North Carolina

Passed March 22d 1825

By the
fluid in th
swelling of
which for s
soft and u
inflamation
than usual
pies the th
nal the th
difficulty of
lungs — Th
the skin dry
corded, an
small in ge
For these s
fever — The
or raises it
these symp

Anasarca.

By this is meant a preternatural collection of watery or serous fluid in the cellular texture of the body. It usually commences with swelling of the feet and ankles, appearing at the close of the day, which for some time disappears in the morning. The tumefaction is soft and inelastic, and when pressed upon with the finger the indentation remaining for some time, the skin becoming much paler than usual. Ascending gradually upwards, the swelling occupies the thighs, trunk and face. When it has become thus general the viscera are affected in a similar way, producing difficulty of respiration by effusion into the cellular tissue of the lungs. The bowels in this disease are uniformly constipated, the skin dry and sometimes hot, the pulse febrile, small, and corded, and there is in almost every case great thirst, the urine small in quantity, and usually deposits a reddish sediment. To these symptoms speedily succeed torpor, heaviness & a slow fever. The serum now becomes depressed through the skin or raises it in blisters. If relief is not speedily obtained from these symptoms, the system soon sinks under hectic fever

with respect
existed, and
established is th
naturally exist
perfect heal
various cavities
after which ena
a topical eff
from an exce
absorption – A
influence are
this point t
depend, altog
Consequently
cut their want
pinion – The
hand, their rem
In all probabilit
should at all te

With respect to the pathology of this disease much Controversy has existed, and indeed the only point which at present seems fully established is that it arises from the destruction of the balance which naturally exist between exhalation and absorption - There is in perfect health a continual exhalation of a watery fluid in the various cavities of the body which serves the purpose of lubrication after which end is attained, it is constantly removed by the absorbents Dropsical effusions thence, it becomes evident, must arise, either from an excess of effusion, or from a decay of the powers of absorption - As our belief in the one or the other must materially influence our practice, It would be a very desireable thing for this point to be settled - The European writers believe that it depends altogether upon debility and relaxation of the System & consequently place confidence principally in Tonic medicines, but their want of success is a sufficient refutation of their opinion - The Practitioners of this Country, perhaps has gone too far on the other hand, their remedies being almost entirely depletory - In all probability it exists in either State of the System, and we should at all times be on the alert to detect the one or the

Alth, and direct

In the trea

1st. To evacua

2nd. To effect a C

And first of the

fortunate that th

Negative absorption

ratio - The practi

tised in this pa

used with decree

be hard, tense, an

the signs of high

Inflation - Emetic

ruption, might be

now given way, to

1st Clear the Stom

Purgatives in th

ing the discharge

of overcoming high

other, and direct our remedies accordingly.

In the treatment of this disease the indications are

1st. To evacuate the water already collected.

2nd. To effect a change in the system which causes the effusion.

And first of the disease as connected with high action. It is fortunate that the remedies which reduce arterial action, invigorate absorption. these two systems acting in an inverse ratio. The practitioners of this Country proceed on this principle & bleed in this particular species of the disease. but it must be used with discretion. and to justify this remedy, the pulse should be hard, tense and corded, and the blood when drawn exhibit the signs of high inflamation. with other usual signs of inflamation. Emetics from their great efficacy in promoting absorption, might be supposed well suited to this disease. but they have now given way to purgatives, and are never resorted to except to clear the stomach of its offending contents.

Purgatives in this disease, are beneficial not only as increasing the discharge of water, but also as one of our best means of overcoming high arterial action, & relieving constipation.

The question
demanded? the
there daily em
forbid Chin em
for it is only
expect much
the appropriate
The drastic
, clearly the abd
fever - but in
mible - here
purgatives par
=ticu with Jalap
with X or XV g
=quent to keep
prescribed as a
in a few days -
fail of curing th
duction of excite

The question next arises, how frequently is their repetition demanded? It was the practice of Sydenham to prescribe them daily unless, the debilitated state of the patient should forbid their use – this must be esteemed generally a correct for it is only by their frequent repetition that we can expect much permanent benefit – In the selection of the appropriate purgative, some discernment is necessary –

The drastic purgatives by many have much used, particularly the older writers, with a view to their hydragogue powers – but in the inflamatory stage I hold them, as inadmissible – here much benefit may be expected from the saline purgatives particularly the Super Tart: Potass: in combination with Jalap – given in doses of ℥ss or ℥ij of the former with X or XV grains of the latter repeated sufficiently frequent to keep up a continual Diarrhœa – By this remedy, prescribed as above directed the disease has frequently yielded in a few days – The above remedies, although they frequently fail of curing the disease, generally produce a sufficient reduction of excitement – Our next remedies should be directed

to the Symp
Sued to the
ing the Sup
Confidence of
tently to Conse
a Diuretic is
it given - G
ofly by Stool -
the same View
With respe
of Opinions ex
on their mee
ive this true
nd decidedly
a Diuretic
f Practitioners
beneficial, are
digestion, as f
in those Cases a

to the Lymphatic System — Of all the Diuretics the one best suited to the particular Stage of the disease I am now considering the Sup: Tart: Potass: is best suited — This has long had the Confidence of Practitioners, and every days' experience I believe tends to Confirm the Confidence placed in it — It operation as a Diuretic is much influenced by the quantity of water with which it is given — Given without much drink it Seldom fails to pass off by Stool — The Vegetable and mineral Alkalies with the same view, have by Some been extolled & by others Condemned

With respect to their mode of operation Some difference of Opinion exist — Cullen believed their diuretic powers depend upon their meeting with an acid in the stomach forming an acetate. Were this true, the Acetate of Potash would be preferable and decidedly more uniform and active in its operation as a Diuretic, which I believe is Contrary to the experience of Practitioners generally — The Cases, in which the Alkalies are beneficial, are when there is much debility in the organs of digestion, as frequently happens in habitual drunkards — and in those Cases attended with great acidity of the Stomach

which prod
here to men
Sir John
For we g
not only
generally
Points:— A
Cols. but i
the arteria
action it is
is that it cann
any length
stomach m
of the pract
a large qu
Purity of m
Practitioner
their prescrib
drop it sho

which produces very distressing effects — I should not omit here to mention a fact which I believe originated with Sir John Pringle, that by combining the Alkalies with a Tonic we greatly increase their powers. When exhibited they not only act as a diuretic, but impart tone to the system generally — The next remedy I shall speak of is the Nit: Potass: — As a Diuretic it is inferior to most articles of the Class but its great efficacy arises from the power it has over the arterial system — & to Dropsy attended with high arterial action it is eminently adapted — The great objection to its use is that it cannot be given in sufficient doses & continued for any length of time without producing considerable distress of stomach nausea &c — this objection we are told by the Professor of the practice may be overcome by administering the medicine in large quantities of water — As a substitute the dulcified spirits of nitre may be used — this has not the confidence of practitioners generally, which proceeds in all probability from their prescribing it in too small doses — instead of 40 or 50 drops it should be given in doses of ℥ss repeated as fre-

frequently as

Of the me

mention one. Of

Considerable dis

that he succeed

ttempt had failed.

this fact should

The following

was discovered acci

Very powerful di

Tinct: Opi

Dulc: Spts:

Vin: Ant: —

with the above

ation

Vegetable desire

ation, it is I be

in Europe — It

The chro

attention — Here when

frequently as necessary - say three or four times a day

Of the mild native Vegetable diuretics, I shall only mention one - Viz: the Common Parsely - this possesses very considerable diuretic properties, & we have been told by Doct: Chapman that he succeeded in curing a case with this remedy, after all others had failed, as this Article can be obtained without cost this fact should be recollected particularly in poor practice -

The following formula, which we should not suppose, was discovered accidentally, by Doct: Chapman & ℓ is stat to possess very powerful diuretic properties. Viz:

℞ Tinct: Opii — ℥ss

Dulc: Spts: Nit: ℥ij

Vin: Ant: — ℥ss. 40.

With the above remark it was my intention to have dismissed the native Vegetable diuretics, but the Pipsissewa, claims some consideration, it is I believe rising in reputation both in this Country & in Europe - It is given in infusion or in extract —

The chronic stage of the disease next demands our attention - here when Constipation is present, the drastic purgatives

although inadmiss
purgatives here
also the Colchicum
notwithstanding w
belong to the very g
demanded, and
proving of no avail
of great utility in th
the disease Wiz
℞ Elater: 1 gr.
Gamboge - 4 "
Dulc: Fib. Piel - ℥j.
The next a
this disease is Digi
considerable reputation in
all other remmedies, wh
This diffuence of opin
their prescribing in diff
Rule I think it will m

although inadmissible in the inflamable Stage become necessary The purgatives here demanded are Calomel with Gamboge - also the Colchicum Autumnale - Scammony, Elaterium &c - Notwithstanding what has been said in opposition to their use, Owing to the very great torpor of the Alimentary Canal they are demanded, and are of great utility - less irritating purgatives proving of no avail - The following formula has been found of great utility in the practice of the Army house in this Stage of the disease (Viz.)

℞ Elater: 1 gr. } One Sixteenth to be given in a Small
Gamboge - 4 " } quantity of water, every hour untill
M. Dule: Sit. Pil - No 1. } Copious watery evacuations are produced -

The next Article of which I shall speak in the Stage of the disease is Digitalis - This Article maintains a very Considerable reputation in this disease - by Some it is extolled above all other remmedies, while others condemn it as wholely ineffacious, This diffuence of Opinion proceeds in all probability from their prescribing in different States of the System - As a general rule I think it will never prove beneficial, So long as the System

will hear a

I come

tain of

dropsey in

combination

former with

Should

authorized Com

Articles are a

they prove b

Hungary Chy

United State

particular

they prove a p

tincture in

water — b

Turpentine Mixt

they trials, Suff

It is here

will bear with impunity evacuations either by bleeding or purging

I come now to speak of one of the most important, and certain of our diuretics viz. the Squill, there is no form of dropsy in which it is not useful — It is usually given in combination with Calomel in the proportion of 2 grs of the former with one of the latter, two or three times a day —

Should in the progress of the disease a cachectic and depraved condition of the system arise, the more stimulating articles are demanded — ~~for~~ such a case the Cantharides may prove beneficial from their know power of producing strangury they may be thought of doubtful efficacy, but its only in excited states of the system that they have this effect — and in the particular state of the system now under consideration they prove a powerful and efficacious diuretic — It is given in tincture in doses of from 20 to 100 drops repeated pro re nata — under similar circumstances the spirits of Turpentine might be supposed useful, I do not know that any trials sufficient to establish its efficacy have been made.

It is here that the Polygala Senega may be used

a Tonic, Ster
its Wide an
more especia
as other A
in which it

Diaph
May have b
to be sufficien
Case of this
liberal use
in his Therap

Various m
applications
vention, as
Vacuum: & Ca

When t
man would Ch
here as provid
with Squills-

From its stimulating and diaphoretic properties, and also from its wide and pervading influence on every part of the System more especially the Lymphatics, I should suppose it preferable to all other remedies but such I believe is not the estimation in which it is generally held.

Diaphoritics are also occasionally resorted to in this disease They have been employed both in this Country and in Europe with sufficient success to warrant their occasional use — One Case of this disease being speedily and effectually cured by the liberal use of Dovers powders is mentioned Doctr. Chapman in his Therapeutics, as occurring in his own practice.—

Various modes for producing diaphoresis by external applications have been advised, none of which I shall mention, as I believe them less efficacious than Combinations of Opium Ipecac: & Calomel given internal —

When this disease is kept up by Visceral disease no one would think of witholding the use of mercury & here as previously mentioned it may be beneficial Combined with Squills & also with Digitalis —

In those C

ption, merce

ch circumst

ms of Dra

and may do

The

~~xx Case of xx~~

To the use

Considerable obje

has been know

Less objections

would be taken

ion, from in atte

inflamations, and

from the use of

be derived from th

giving support to

To prev

rat to the roller

To those Cases of Dropsey attended with deminished absorption, mercury is likewise admirably suited - & should under such circumstances not be overlooked - But in the Common forms of Dropsey it will not in any way promote the Cure and may do injury ——

The local means usually resorted to in Cases of excessive ~~in Case of excessive~~ distention are incisions, & punctures & Blisters

To the use of these remedies particularly to the extremities Considerable objections exist - Gangrene and mortification has been know to follow particularly Blisters -

Less objections exists as to the use of punctures, great Care should be taken not to wound parts much beneath the Skin, from inattention to this circumstance, Erysipellatous inflamation, and all the Consequences so much to be dreaded from the use of blisters has resulted - much benefit may be derived from the use of the roller, it proves benficial by giving support to the weakened & relaxed Vessels -

To prevent the recurrence of Anasarca bile may resort to the roller as above, it should be made of flannel

The Cold bath
of doubtful eff
The most
the Bark and
judiciously emp
to the diet it d
of digestion — c
deposition to return
in the system b
prescribed merely

The Cold bath, has been recommended, but I think it generally of doubtful efficacy, and may frequently prove injurious.

The most effectual plan is the exhibition of Tonics of these the Bark and Chalibeates are perhaps preferable — Exercise judiciously employed should not be overlooked — with respect to the diet it should be nourishing and at the same time easy of digestion — Should the disease still show a strong disposition to return we should produce a total change in the system by the judicious administration of Mercury prescribed merely with a view to its alterative effects.

Negotia
for the